REMARKS

Claims 1-15 and 17-18 are pending in the application. By this Amendment, claim 16 is canceled and claims 1, 8, and 15 are amended. Reconsideration and withdrawal of the rejections in view of the foregoing amendments and the following remarks is respectfully requested.

Entry of the amended claims is proper under 37 C.F.R. §1.116 since the amendments: (1) place the application in condition for allowance (for the reasons discussed herein); (2) do not raise any new issues requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution without incorporating additional subject matter); (3) satisfy a requirement of form asserted in the previous Office Action; and/or (4) place the application in better form for appeal (if necessary). Entry is thus requested.

I. Formal Matters

The Office Action objects to the drawings under 37 C.F.R. §1.84(p)(5) because the drawings allegedly fail to show the GDMO compiler 22. In the Request for Approval of Drawing Amendment, Applicants propose to add reference number 22 and a lead line to identify the GDMO compiler 22 in Figure 1. This change conforms Figure 1 to the text of the originally filed application, and thus does not add any new matter. Approval of the proposed drawing amendments is respectfully requested and withdrawal of the objection is respectfully requested.

The Office Action also objects to claims 1 and 8 because of an informality. By this Amendment, claims 1 and 8 have been amended in accordance with the Examiner's helpful suggestion, and are believed to comply with the requirements of the Patent Office. Accordingly, withdrawal of the objection is respectfully requested.

II. Claim Rejections - 35 U.S.C. §103 (a)

A. Claims 1-3, 5-11, and 13-18

Claims 1-3, 5-11, and 13-18 stand rejected under 35 U.S.C. § 103(a) over Bentley et al. (U.S. Patent No. 5,815,415) (hereinafter Bentley) in view of Lin et al. (U.S. Patent No. 6,243,457 B1) (hereinafter Lin). This rejection is respectfully traversed.

Claims 1, 8, and 15 broadly recite features of the preferred embodiment. Additionally, claim 15 has been amended to more particularly recite features of the preferred embodiment. For example, referring to Figure 1 of the preferred embodiment, a kernel 14 preferably runs in the form of a thread and is responsible for initializing a managed system, establishing an association with other management systems, performing management operations and updating new MO information without recompiling or restarting the managed system.

The full set of MO instances available across a management interface is organized into a tree structure in the containment tree 16. When an operation is performed in a managed system, all MO instances are accessed through the containment tree 16. The MOF 18 maintains the information on all MO classes. Utilizing the GDMO compiler 22, the class information is

generated from GDMO scripts and stored in specific files called External Meta file (EMM) 26. The EMM 26 is a special set of files including several files where each file contains information of MO class elements. The output of GDMO compiler 22 includes MO class codes.

The MO class codes are compiled into the dynamic library 24 preferably in a form of a dynamic link library by using an appropriate compiler, and the EMM 26 is used to initialize and update the MOF when the MO classes are added into a network management system. Thus, the MO class information is preferably completely separated from the MO instance implementation. Additionally, the EMM has all managed instances. Thus, no MIB tree needs to be created each time an update is necessary.

The asserted combination of references fails to establish a *prima facie* case of obviousness, as required by Section 103. For example, the combination fails to teach or suggest, *inter alia*, a management system kernel that provides management systems with a run-time environment, and a managed object generation environment that provides a development environment for managing applications, wherein the management system kernel can at least one of dynamically add and dynamically modify managed object information based upon an external meta file from the managed object generation environment without interrupting an operation of the network management system, as recited in claim 1.

Additionally, the asserted combination fails to teach or suggest a network management method including, *inter alia*, storing a dynamic class loading routine in a management system kernel, and updating managed object information on the management system kernel without

interrupting an operation of the management system by ... loading a dynamic library to the managed object framework utilizing the dynamic class loading routine, as recited in claim 8.

Finally, the asserted combination fails to teach or suggest a network management method including, *inter alia*, storing a dynamic class loading routine in a management system kernel of the managed system, and updating the management system kernel by modifying managed object information in the management system kernel while a managed system is operating by utilizing the dynamic class loading routine, and generating the MO information to be modified and generating an external meta file (EMM) in a managed object generation environment of the managed system wherein the dynamic class loading routine opens the EMM file to modify the MO information in the management system kernel, as recited in amended claim 15. Applicant notes that claim 15 has been amended to incorporate the features of dependent claim 16, which has been examined by the Patent Office. Because the subject matter has been examined, no new issues are raised by this Amendment.

Bentley relates to a computer aided design system, generally referred to as a computerized modeling system (CMS). Bentley discloses that the architecture of the CMS includes various layers, including a static kernel 12, a dynamic framework 14, and a portable persistent model 16. The kernel 12 provides the services necessary to load and execute the higher levels.

Referring to column 8, lines 4-7, Bentley discloses that the kernel 12 can be extended by loading additional dynamic modules 23 with associated DLS files. The DLS files are Dynamic Link Specification files, and are provided within the kernel 12. Accordingly, they are not

external to the kernel 12. Furthermore, they are not external meta files. The DLS files are simply used resolve the addresses of the native code functions in the kernel 12, not a dynamic library loaded to the managed object framework.

Accordingly, Bentley fails to teach or suggest dynamically modifying managed object information based upon an external meta file from the managed object generation environment without interrupting an operation of the network management system. Furthermore, Bentley fails to disclose loading a dynamic library to the managed object framework.

Although at column 16, lines 47-55, Bentley discloses a "meta-class," the Bentley meta-class merely contains a description of an associated class object. Additionally, even if the meta-class were equivalent to the claim 1 meta file there is no teaching that the meta-class is external and used by the kernel to dynamically add and dynamically modify managed object information without interrupting an operation of the network management system.

Moreover, Lin, either alone or in combination with Bentley, fails to teach or suggest at least those features that are neither taught nor suggested by Bentley. For example, Lin relates to an Intelligent Network wherein a service application process may be deployed without restricting user access to the Intelligent Network during adding and updating information.

In particular, Lin discloses using separate MIB trees for service applications and the service control point platform MIB tree. Referring to Lin, column 7, lines 58-66, Lin requires the use of separate MIB trees for each update and each new service addition. Once the information is loaded, the original MIB tree is deleted. *See* Lin, Column 9, lines 55-65. Thus, one

containment tree comprises the Service Control Point platform function while a separate containment tree is adopted for each new service application. *See* Lin, Column 4, lines 13-17. Accordingly, Lin does not mention an external meta file used by the kernel to dynamically add and dynamically modify managed object information without interrupting an operation of the network management system.

Furthermore, Lin fails to disclose loading a dynamic library to the managed object framework utilizing the dynamic class loading routine when the dynamic class loading flag is on, and resetting the dynamic class loading flag to off.

Accordingly, the combination of Bentley and Lin fails to teach or suggest at least an external meta file used by the kernel to dynamically add and dynamically modify managed object information without interrupting an operation of the network management system. Also, the combination of Bentley and Lin fails to disclose loading a dynamic library to the managed object framework. Accordingly, a *prima facie* case of obviousness cannot be made.

Furthermore, it is respectfully submitted that one of ordinary skill in the art would not have been motivated to modify the Bentley device according to Lin by using an external meta file to avoid network interruption. Neither Bentley nor Lin provides no such teaching or suggestion to combine. Applicant respectfully submits that it requires the impermissible use of hindsight, reconstruction in view of Applicants' own disclosure, to arrive at the system and method as recited in claims 1, 8, and 15. For at least these reasons, it is respectfully submitted

that claims 1, 8, and 15 are allowable, and withdrawal of the rejection of there claims is respectfully requested.

Claims 2, 3, and 5-7 depend from claim 1, claims 9-11, 13, and 14 depend from claim 8, and claims 16-18 depend from claim 15. These dependent claims are allowable for at least the reasons discussed above with respect to the corresponding independent claims. Because a *prima facie* case of obviousness has not been made, it is respectfully requested that this rejection be withdrawn.

B. Claim 4

Claim 4 stands rejected under 35 U.S.C. § 103(a) over Bentley in view Applicant's background art. This rejection is respectfully traversed.

The asserted combination of references fails to establish a *prima facie* case of obviousness, as required by Section 103. For example, claim 4 depends from claim 1. As discussed above, Bentley fails to teach or suggest all the features of claim 1. Moreover, the recited portion of Applicant's background art (specification page 2, lines 5-6 and 10-18) fails to teach or suggest the features that are neither taught nor suggested by Bentley. For example, the background art teaches a network management system wherein the network management system is stopped in order to update or add new managed objects in a containment tree. Consequently, the asserted combination fails to teach or suggest all of the claimed features, and it is respectfully submitted

that a *prima facie* case of obviousness cannot be made. Withdrawal of this rejection is thus respectfully requested.

C. Claim 12

Claim 12 stands rejected under 35 U.S.C. §103(a) over Bentley, in view of Applicants background art, and further in view of Sheard et al. (U.S. Patent No. 6,208,345) (hereinafter Sheard). This rejection is respectfully traversed.

The asserted combination of references fails to establish a *prima facie* case of obviousness, as required by Section 103. For example, Claim 12 depends from claim 8. As discussed above, Bentley fails to teach or suggest all the features of claim 8. Moreover, neither the recited portion of Applicant's background art nor Sheard teaches or suggests the features that are neither taught nor suggested by Bentley.

Sheard relates to a visual data integration system architecture and method. In particular, Sheard discloses a single user interface that provides information to users. Sheard also discloses a processing thread may make use of additional system resources. *See* column 15, lines 47-50.

Sheard fails to disclose creating a dedicated agent that takes charge of subsequent management operations from the management system requesting an association if an additional thread can be created. Moreover, the Patent Office does not rely on these references to teach such features. Consequently, it is respectfully submitted that a *prima facie* case of obviousness cannot be made. Withdrawal of this rejection is thus respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **Anthony H. Nourse**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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